

REMARKS

Claims 1, 3-4 and 7-8 remain in this application. Claims 2, 5 and 6 have been cancelled.

In the Office Action dated August 11, 2003, the Examiner rejected claim 2 of the present application under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Regardless of the details of such rejection, Applicant notes that claim 2 has been canceled via the present Amendment such that the associated §112 rejection has been obviated.

The Examiner also rejected, in particular, independent claim 1 of the present application under 35 U.S.C. §103(a) as being unpatentable over Danziger (U.S. Patent No. 6,404,952) in view of Unger (U.S. Patent No. 4,415,227). Specifically, the Examiner stated that, "Danziger discloses the device having an entry face (194) onto which a part of a coherent beam (192) of light source (3) is directed; and a reflector (190) for deflecting another part of the coherent beam of the light source onto the entry face such that an interference pattern for exciting various modes is produced (Col. 8, lines 59-bottom)..." Applicant respectfully submits that the Examiner's determination is erroneous for at least two reasons.

First of all, the device in Danziger does not, in fact, teach or suggest directing a "coherent beam" of light onto an entry face. Referring to the section of the Danziger patent cited by the Examiner, a "Gaussian beam" emerges from the end of a single mode fiber. See Col. 8, lines 59-66. By definition, such Gaussian beam is formed of a light spectrum of different wavelengths. Indeed, the whole purpose of the Danziger device is to compensate for chromatic dispersion which results when different wavelengths of light pass through a fiber at different speeds. Thus, Danziger would not be concerned with, and does not disclose, a light source which emits a "coherent beam," one having a single wavelength.

Moreover, Applicant respectfully submits that the device of Danziger does not produce an interference pattern "for exciting various modes" as per the claimed invention. Conversely, Danziger merely discloses the desirability of transforming an

optical signal having a first spatial mode to an optical signal having a second (higher) spatial mode and then transmitting the transformed signal through a higher order mode fiber. This is done to take advantage of the fact that higher order modes prove to be better for chromatic dispersion compensation in a typical optical communication system. The light which then exits such chromatic dispersion compensation fiber is thereafter transformed back to the first spatial mode. Nowhere, however, does the Danziger reference teach or suggest deflecting part of a coherent beam of light onto an entry face so as to generate an interference pattern for exciting (or generating) additional modes.

In light of the above, Applicant respectfully submits that the Danziger patent fails as a primary reference for the Examiner's §103(a) rejection, and that all of the claims of the present application are both novel and non-obvious over the art of record. Accordingly, Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

It is further acknowledged that a one-month extension of time (\$110.00) is due in connection with this Amendment. However, if any additional fees are due in connection with this application as a whole, the Examiner is authorized to deduct said fees from Deposit Account No.: 02-1818. If such a deduction is made, please indicate the attorney docket number (0112740-377) on the account statement.

Respectfully submitted,

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Dated: December 11, 2003